

ABSTRACT OF THE DISCLOSURE

In an RTP machine, for a series of leaf positions which are generated by a Multileaf-Collimator-Position-Calculation-Unit, a speed limit is established by a Motion-Speed-Limit-Establishing-Unit. Further, a Motion-Display-Unit indicates the area where motion speed exceeds the established speed and/or a Leaf-Position-Correction-Unit controls the area in order to be equal to or less than the established speed limit. Furthermore, a Motion-Acceleration-Calculating-Unit calculates motion acceleration of the multileaf collimator, and the Motion-Display-Unit indicates the area where the calculated motion acceleration exceeds the established limit and/or the Leaf-Position-Correction-Unit controls the area in order to be equal to or less than the established acceleration limit. An interruption of irradiation due to a multileaf collimator positioning error is prevented while the treatment is being conducted by the multileaf collimator motion limit control in radiation therapy such as conformal therapy or others which the multileaf collimator moves in during irradiation.